

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for ~~representing~~ managing an active computing environment comprising:

encapsulating ~~one or more~~ a plurality of active processes into ~~said active computing environment~~ a compute capsule; and

encapsulating ~~[[a]]~~ system environment information relating to said processes into said ~~active computing environment~~ compute capsule, said system environment information including host-specific data.

2. (Currently amended) The method of claim 1 wherein said system environment comprises an associated state of said active processes and said compute capsule includes state information indicating what each of said processes is doing at any given time.

3. (Currently amended) The method of claim 2 further comprising:
removing a process from said active ~~computing environment~~ compute capsule when said process becomes inactive.

4. (Currently amended) The method of claim ~~[[4]]~~ 1 further comprising:
automatically adding a new process to said ~~active computing environment~~ compute capsule when said new process is a child of an already-encapsulated process ~~becomes active.~~

5. (Currently amended) The method of claim 1 further comprising[[:]] halting said ~~active computing environment~~ compute capsule.

6. (Currently amended) The method of claim 5 further comprising[[:]] storing said ~~active computing environment~~ halted compute capsule off-line in a non-volatile storage medium.

7. (Original) The method of claim 6 wherein said non-volatile storage medium is a disk.

8. (Original) The method of claim 2 wherein said state further comprises a CPU state.

9. (Original) The method of claim 2 wherein said state further comprises a file system state.

10. (Original) The method of claim 2 wherein said state further comprises a device state.

11. (Original) The method of claim 2 wherein said state further comprises a virtual memory state.

12. (Original) The method of claim 2 wherein said state further comprises an inter-process communication state.

13-24. (Canceled).

25. (Currently amended) A computer program product comprising:

a computer usable medium having computer readable program code embodied therein ~~configured to represent an active computing environment~~, said computer program product comprising:

computer readable code configured to cause a computer to encapsulate one or more active processes into ~~said active computing environment~~ a compute capsule; and

computer readable code configured to cause a computer to encapsulate a system environment relating to said active processes into said ~~active computing environment~~ compute capsule, said system environment including host-specific data.

26. (Original) The computer program product of claim 25 wherein said system environment comprises an associated state of said active processes.

27. (Currently amended) The computer program product of claim 26 further comprising:

computer readable code configured to cause a computer to remove a process from said ~~active computing environment~~ compute capsule when said process becomes inactive.

28. (Original) The computer program product of claim 27 further comprising:

computer readable code configured to cause a computer to add a process to said active computing environment when said process becomes active.

29. (Currently amended) The computer program product of claim 25 further comprising:

computer readable code configured to cause a computer to ~~halt~~ suspend said ~~active computing environment~~ compute capsule.

30. (Currently amended) The computer program product of claim 29 further comprising:

computer readable code configured to cause a computer to store said ~~active computing environment~~ suspended compute capsule ~~off-line~~ in ~~[[a]]~~ non-volatile storage ~~medium~~.

31. (Currently amended) The computer program product of claim 30 wherein said non-volatile storage ~~medium~~ is a disk

32. (Original) The computer program product of claim 26 wherein said state further comprises a CPU state.

33. (Original) The computer program product of claim 26 wherein said state further comprises a file system state.

34. (Original) The computer program product of claim 26 wherein said state further comprises a device state.

35. (Original) The computer program product of claim 26, wherein said state further comprises a virtual memory state.

36. (Original) The computer program product of claim 26 wherein said state further comprises an inter-process communication state.

37. (New) The computer program product of claim 25 wherein said computer program product is a computer operating system.

38. (New) The computer program product of claim 37 wherein said computer program product includes a system call for creating a new compute capsule.

39. (New) The computer program product of claim 38 wherein said system call for creating a new compute capsule is implemented into a login shell of said computer operating system such that a login session is encapsulated.

40. (New) The computer program product of claim 37 wherein said computer operating system allows a user to create said compute capsule and selectively add processes into said compute capsule so that said compute capsule has arbitrary contents.

41. (New) The computer program product of claim 37 further comprising a system call that suspends said compute capsule and records a state of said compute capsule.

42. (New) The computer program product of claim 41 further comprising a system call that restarts said compute capsule from said state.

43. (New) The computer program product of claim 41 wherein said state of said compute capsule includes host-specific data that is not globally accessible.

44. (New) The method of claim 1 wherein all of a user's processes are added to said compute capsule.

45. (New) The method of claim 44 further comprising adding all of said user's open devices, configuration settings, environment information, working directories and files, assigned resources, installed software and internal program state to said compute capsule.

46. (New) The method of claim 44 further comprising:

adding all of a user's processes and system environment to said compute capsule;

repartitioning a file system state and moving some of said file system state into said compute capsule;

repartitioning a device state and moving some of said device state into said compute capsule;

repartitioning a virtual memory state and moving some of said virtual memory state into said compute capsule; and

repartitioning inter-process communication (IPC) state and moving some of said IPC state into said compute capsule.

47. (New) The method of claim 1 wherein upon any change in processes added to said compute capsule, process information in said compute capsule is modified to reflect said change.

48. (New) The method of claim 1 wherein upon any change in said system environment, system environment information in said compute capsule is modified to reflect said change.